

App. Serial No. 10/509,562
Docket No.: NL 020263 US

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Remarks

Applicant respectfully submits that Khan *et al.* (U.S. 2002/0120915) does not teach each of the claimed limitations. For the reasons and arguments set forth below, including those presented in the Response dated July 12, 2006 which Applicant hereby incorporates by reference, Applicant submits that the claimed invention is allowable over the Khan reference.

The non-final Office Action dated August 16, 2006 indicated that claims 1-8 stand rejected under 35 U.S.C. § 102(e) over Khan.

Applicant has made minor amendments to claims 1 and 6; these amendments are not being made to overcome any issues of patentability or to overcome the rejections raised by the Office Action.

Applicant traverses the Section 102(e) rejections of claims 1-8 because the cited portions of the Khan reference do not correspond to claimed limitations directed to a communication means for coupling the functional units and the distributed register file. 35 U.S.C. § 112(6) states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure described in the specification and equivalents thereof." *See, e.g.*, M.P.E.P. § 2181(II). Claim 1 includes limitations directed to means for coupling the functional units and the distributed register file. Applicant submits that the Office Action has failed to show correspondence between the Khan reference and the means for coupling as described in the Applicant's specification. For instance, the specification teaches that communication means transfer values from the functional units to the distributed register file segments (*see, e.g.* paragraph 0022). In contrast, Applicant submits that the cited portions of the Khan reference teach that the Office Action's referenced multiplexers pass information from the registers to the functional units. More specifically, the cited portions of the Khan reference teach that the two register files A and B are connected to the functional units of the opposite side via unidirectional cross paths 202 and 252 (*see, e.g.*, Fig. 2; par. 0036, lines 14-16). The cited portions of the Khan reference further teach that "the only cross communication is via the cross paths, and these cannot be used to store a result on the register file of the other side" (*see, e.g.*, par. 0036, lines 19-22). Thus, the cited portions of the Khan reference do not teach a communication means that allow the functional units of group A

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to transfer values to register file B and the functional units of group B to transfer values to register file A. Accordingly, the Office Action has not shown corresponding teachings to the communication means as taught in Applicant's Specification and the Section 102(e) rejection of independent claim 1, as well as the rejections of claims 2-8 that depend from claim 1, are improper and Applicant requests that they be withdrawn. Notwithstanding the impropriety of the rejections of all of the dependent claims as related to the independent claims above, the limitations of certain dependent claims are addressed further below.

Regarding claim 3, the Office Action fails to cite to any portion of the Khan reference that corresponds to a first latency and a second latency, or that the first latency exceeds the second latency. Moreover, the Office Action appears to be erroneously interpreting the latency to be "any latency." Applicant submits that the claimed limitations are directed to a first latency that exceeds the second latency and therefore the claimed limitations are not directed to "any latency" as asserted by the Office Action. Thus, the Office Action has failed to provide correspondence for these claimed limitations in the teachings in the Khan reference.

Regarding claim 4, the Office Action fails to cite to any portion of the Khan reference that corresponds to the claimed limitations directed to a bus that comprises at least one pipeline register. Applicant submits that mere latching of data (as asserted by the Office Action) does not correspond to a pipelined register. Moreover, Applicant can find no mention of a pipeline register in the Khan reference.

Regarding claim 6, the cited portions of the Khan reference do not correspond to claimed limitations directed to a first pass unit that passes data from one of the distributed register files associated with the first plurality of functional units to one of the distributed register segments associated with the second plurality of functional units. The Office Action appears to assert that data path 202 corresponds to the claimed limitations. Applicant submits that the cited portions of the Khan reference fail to teach that data path transfers data from the functional blocks to the registers (*i.e.*, data path 202 is, instead, taught to transfer from the registers to the functional blocks). Moreover, Applicant is unable to find any teaching in the cited portions of the Khan reference that teach a path that allows data from functional blocks in data path A to register B or from functional

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blocks in data path B to register A as asserted by the Office Action. Therefore, the Office Action has failed to show that the Kahn reference teaches each of the claimed limitations of claim 6.

Applicant has added new claim 9 which should be allowable over the Khan reference. For example, Applicant submits that the Khan reference does not teach or suggest a communications device that transfers values from a selected functional unit to each of the plurality of register file segments. Accordingly, Applicant requests that new claim 9 be allowed.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of Philips Corporation at (408) 474-9063.

Please direct all correspondence to:

Corporate Patent Counsel
Philips Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131

By: 
Name: Robert J. Crawford
Reg. No.: 32,122
(VLSI.497PA)

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